



THE

EXPERIMENT

No. 2

LIGHT...LEAN...LETHAL

Sept. 5, 2000

Langley provides logistical support

By 2nd Lt. Kim Layne
JEFX Public Affairs

LANGLEY AIR FORCE BASE, Va. -- The Operations Support Center here is providing reachback capability to the forward deployed forces during Joint Expeditionary Forces eXperiment '00 taking place through Sept. 15 at various locations throughout the United States.

"The Air Force is trying to reduce its forward footprint requirements for contingencies, due to force protection issues as well as airlift savings," said Capt. Loretta Krakie, Agile Combat Support Working Group Lead.

Using the technology ini-

tiatives, Krakie said the Air Force is experimenting with what types of combat support information can be generated in the rear and pushed forward, without having people move forward.

The majority of support coming from Langley falls into the realm of agile combat support. This means that the Langley command and control center is providing logistical and sustainment support to the forward locations, including the Combined Air Operations Center at Hurlburt Field, Fla., and the CAOC-forward at Nellis.

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Photo by Senior Airman Lee Rogers

Cable ready

Staff Sgt. Barry Craw unrolls power cords to supply electricity in the Hurlburt Field, Fla., experiment area.

Streamlining forward communications

By Staff. Sgt. Lori Wise
JEFX Public Affairs

NELLIS AIR FORCE BASE, Nev. -- Major command representatives are studying the JEFX '00 systems that provide inter-connectivity among Nellis' command and control systems and participating aircraft.

They are also looking at operations that streamline communication between all locations gathering information

around the country.

The Combined Air Operations Center-Forward here will focus on carrying out time critical targeting, while Nellis' Expeditionary Operations Center, consisting of wing-level command and control elements of a "deployed" air expeditionary force, will plan and execute missions tasked by the CAOC, at Hurlburt Field, Fla.

"This year there's been an evolution of command and control, and systems

integration for agile combat support initiatives in the experiment," said Jeff Posner, Air Warfare Center support coordinator for Joint Expeditionary Force eXperiment '00. "The architecture in the Nellis JEFX compound is expanded and more in-depth, and Indian Springs Air Force Auxiliary Field, which operated relatively autonomously last year, is more integrated ... for this experiment."

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Experiment is third in series

Joint Expeditionary Force eXperiment '00 provides the Air Force a vehicle for experimentation with operational concepts and technologies that enhance capabilities of the 21st century.

It's part of a broader effort to implement Joint Vision 2020, exploit the revolution in military affairs and demonstrate emerging Air Force capabilities to deploy and employ decisive aerospace power for the joint force commander.

The origins of JEFX can be traced back to an Air Force Command and Control summit in April 1997. Among the proposals at that time was to manage the command and control as a weapon system and to establish a lead agency to

serve as the Air Force focal point for command and control across all Air Force major commands.

The Air Force Chief of Staff directed the establishment of what was to become the Aerospace Command and Control and Intelligence, Surveillance and Reconnaissance Center at Langley Air Force Base, Va. The CSAF then directed the center to develop and manage a series of experiments to explore emerging technologies, processes and requirements to strengthen Air Force capabilities into the next millennium.

EFX '98 became the Air Force's first large-scale experiment. It explored the ability to move information while de-

playing fewer people and less equipment to maintain the situational awareness of our commanders and fighting forces as they deployed to forward areas.

JEFX '99 built upon the lessons learned in the '98 experiment to better integrate our space partners and space resources into the expeditionary aerospace operations. It also attempted to integrate our coalition partners into AOC operations.

The focus of this year's experiment is agile combat support and time-critical targeting that provides more capability to the Joint Force and to the Combined Forces Air Component Commander.

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"The operational wing gets its tasking from the CAOC and its sustainment support from the Air Force Forces staff," said Krakie. "If the AFFOR-Forward doesn't have the resources in-theater to fulfill wing sustainment requirements, they will reachback to the AFFOR-Rear staff at Langley for that support. The AFFOR Rear staff will also be doing long term sustainment planning and course of action decision support."

JEFX '00 is focused on agile combat support and time critical targeting. Time critical targeting focuses on the Air Force improving its ability to find and destroy mobile high threat targets, such as mobile missile launchers.

The majority of TCT experimentation is being done at Hurlburt and Nellis. But, Langley is a key node in supporting many of the agile combat support functions, experimenting with 10 technology and two process initiatives.

"These initiatives cut a broad swath through the roles and responsibilities of agile combat support, from logistics planning, maintenance, and munitions, to medical, weather, and force protection, and will be used in ACS activities from early contingency planning through sustainment operations," explained Krakie.

One initiative allows civil engineers to conduct detailed site planning before setting foot at a site, producing the 90 percent solution, said Krakie.

"All of these automated capabilities, viewed in an integrated way, give us the capability to conduct logistics feasibility analysis and detailed beddown planning, enabling faster and more accurate deployment and employment of air power," said Krakie.

Following JEFX 00, the large scale Air Force experiment will become a biennial event.

Emergency contacts during JEFX

During a deployment or temporary duty assignment, such as Joint Expeditionary Force eXperiment '00, knowing the right numbers and people to call can be critical in the event of an emergency.

Each JEFX '00 location has a 24-hour duty section which may be contacted in the event of an emergency.

Langley AFB, Va.

Langley Joint Personnel Access Center (24-hour access). Phone (757) 225-1280.

Hurlburt Field, Fla.

Hurlburt JPAC (24-hour access). Phone (850) 884-9000, ext. 9070.

Nellis AFB, Nev.

Nellis JEFX locator (24-hour access). Phone (702) 652-9892.

THE EXPERIMENT

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JEFX focus is agile combat support

By 2nd Lt. Paula Kurtz
JEFX Public Affairs

Light, lean and lethal.

It's a phrase that many are already using to describe the military's Expeditionary Aerospace Forces. But when it comes to providing Agile Combat Support for expeditionary operations, that mantra could be considered more of a goal than a current state of operations.

"In Kosovo, providing combat support was one of our biggest internal challenges," said Col. Bill McGill, director of the combat support division for Joint Expeditionary Force Experiment '00. "As a result, many of our initiatives for this experiment will address shortcomings from that operation."

Combat support traditionally encompasses those logistical functions that deploy forward with the aircraft in the event of a contingency, such as maintenance, supply, and transportation. The concept of agile combat support also accounts for other services related to the beddown of the forward-deployed people and equipment, such as lodging, feeding and force protection.

Five Emphasis Areas

This year's JEFX experiment will focus on five emphasis areas. Along with agile combat support, assessors will evaluate initiatives in time critical targeting, employing air mobility, joint battlespace infosphere, and intelligence, surveillance, and reconnaissance battle management.

Operation Allied Force was still in full swing when JEFX planners decided to make agile combat support a central focus of this year's experiment. Now, after 13 months of planning and three spirals leading up to the main event, logisticians from 27 functional areas will work together to test 11 initiatives during the two-week experiment.

As the name suggests, agile combat support is all about getting the right numbers of support personnel and equipment to the right place at the right time to support requirements outlined by the theater commander. In most cases, the "right" numbers are based on historical data or worst-case scenarios when planners don't have the information

they need to accurately plan for the initial deployment and support package.

Leaner Force

One goal of the JEFX initiatives is to "reduce the mobility footprint of early-arriving forces," according to McGill.

"Right now it would take approximately 11 C-17s to move this entire Combined Air Operations Center to a forward location," explained McGill. "The initiatives we're testing here will enable us to collect, compile and disseminate accurate data at the pre-deployment stage, so when the deployment package is built, the requirements are based on real knowledge rather than a best-guess or worst case scenario."

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Nellis (Continued from Page 1)

"The agile combat support initiatives are now integrated with the Operations Support Center at Langley AFB, Va., Combined Air Operations Center at Hurlburt Field, Fla., and the EOC at Nellis, as well as the forward operating location at Indian Springs," he said.

Time critical targeting, an issue that was prevalent in Kosovo, will be focused on during JEFX '00.

Posner explained that lessons learned during the live-fly portion of JEFX '99 have been used to restructure the live-fly this year, to make more effective use of time critical targeting and the Nellis ranges.

In addition, Air Force assets at Ft. Polk, La., will include F-16s, A-10s and C-130s," said Al Wood, Air Warfare Cen-



Photo by Staff Sgt. Wayne Clark

Maj. Patrick Saater and Capt. Rocky Favorito look over the JEFX concept at Nellis AFB, Nev.

ter support coordinator for JEFX. "The biggest challenge has been coordinating with the many agencies involved at a variety of locations and getting things done in a timely manner."

Delivering the right equipment and personnel on time and to the right place is the key to 21st century operational planning. Taking months to build up supplies as was done in the Gulf War, is not a luxury that can be expected in the future.

Bringing together the people, processes and technology that allow improvement in war fighting capability now, will help joint leaders to make future investment decisions that support expeditionary forces.

Live-fly tests JEFX initiatives with realistic scenarios

By Tech. Sgt. Rich Covington
JEFX Public Affairs



Photo by Staff Sgt. Jerry Morrison

An F-16 Fighting Falcon from the 40th Flight Test Squadron, Eglin Air Force Base, Fla., prepares to aerial refuel from a KC-135R Stratotanker in this file photo.

NELLIS AIR FORCE BASE, Nev. -- Few bases can compare with the facilities, technologies and ranges at this location, which is why the live-fly portion of the Joint Expeditionary Force eXperiment '00 is being held here.

JEFX is a large-scale experiment designed to prepare the Air Force for the challenges of future combat. It combines live-fly forces, simulations and technology to form a realistic environment for warfighters to explore new technologies and processes. The live-fly portion takes place Sept. 11 - 14.

Curt Seebaldt, JEFX live-fly planner for the Command and Control Training and Innovation Group, Hurlburt Field, Fla., agrees that Nellis is ideal for such a challenging event.

"Nellis has the airspace, ranges, threats and infrastructure in place to support such a large-scale event. It's

the logical choice for the live-fly portion of the experiment," he said.

Nellis hosts several realistic combat training exercises every year such as Red Flag and Air Warrior.

In addition, the 422nd Test and Evaluation Squadron, which is tasked with testing and evaluation of new fighter technology and tactics for the Air Force, is based at Nellis.

The live-fly phase begins right after a major electronic warfare exercise. Many assets from Green Flag 00-4 will already be in place at Nellis and roll right into JEFX.

"Red Flag is used to handling large realistic exercises," said Capt. Brian Kieffer, 414th Combat Training Squadron.

According to Seebaldt, the Nevada Test and Training Range is a major reason

experts chose this location. The 3.1 million-acre range located north of Nellis is designed for realism and provides the aircrews and planners more leeway than other locations.

For example, the range holds some of the world's most realistic targets and threat equipment.

The range also uses the Nellis Air Combat Training System, a computerized system capable of displaying real time interaction and information on more than 100 aircraft, 20 threats and several ground targets.

The live-fly portion of JEFX '00 involves 100 aircraft from the Air Force, Navy and Marines.

More than 65 of these platforms and 1,600 people will operate out of Nellis.

This year, the Predator unmanned aerial vehicle is integrated over the range during strikes, and controllers will keep fighters and bombers deconflicted with the UAV.

About 30 aircraft will also be flying at the Joint Readiness Training Center, Fort Polk, La., in support of Millennium Challenge 2000.

"Nellis has taken the lead on JEFX '00 live-fly," said Seebaldt. "What happens during live-fly will shape the future of time-critical targeting, which is a high-interest item to Gen. John P. Jumper, Headquarters Air Combat Command Commander, Langley Air Force Base, Va."

Jumper will also act as the Combined Forces Air Component Commander for this year's experiment.

News notes

Promotion

A JEFX '00 participant on temporary duty to Hurlburt Field, Fla. from the 55th Wing at Offutt Air Force Base, Neb., was promoted on Labor Day.

Keri Jordan, who is working in the protocol section for the experiment, sewed on her third stripe as she was promoted from an airman first class to senior airman.

Public affairs

Information for "The eXperiment," may be submitted to the local public affairs cell at **Hurlburt Field, Fla.**, at Bldg. 90005, by calling (850) 884-8351, or e-mailing jefx.pa@hurlburt.af.mil

At **Langley Air Force Base, Va.**, submit information and stories to Bldg. 12 or by calling (757) 225-1262.

At **Nellis AFB, Nev.**, information and story ideas may be submitted to Bldg 454 or call (702) 652-6399.

The newsletter will be published Sept. 8, 12 and 15.

Experiment to enhance future exercises

By Tech. Sgt. Rich Covington
JEFX Public Affairs

NELLIS AIR FORCE BASE, Nev. --Air Combat Command and Nellis officials are closely watching the Nellis JEFX Combined Air Operations Center-Forward, and its time-critical targeting cell.

The results of this experiment will be used by ACC and other Air Force units to determine the future of a command and control center for the joint/combined aerospace operations centers, said Lt. Col. Patrick J. Sheets, commander of Det. 3, Nellis Combat Operations.

In addition, the facility, some of its infrastructure and lessons learned, will be turned over to Nellis after JEFX '00 concludes. Nellis will then use the CAOC to enhance future exercises, such as Red Flag.

Sheets said his new organization "will provide a combat operations platform to perform training, testing and experimentation of the equipment, tactics and procedures that make up the combat operations capability in a joint/combined aerospace operations center.

"Everything we've done in Red Flag is at a tactical level. This facility will enable us to train at an operational level," he said.

The new facility will be able to make exercises work more on a theater level



Photo by John Broussard

Nellis AFB members prepare to deploy an 'enemy' missile launcher for Joint Expeditionary Force eXperiment '00.

of combat, said Sheets. "The intent is not to alter any of the great tactical training that goes on over the Nevada Test and Training Range."

As such, the colonel is closely involved in helping and observing the CAOC-Forward and, especially, time-critical targeting cell processes during the JEFX. He will help make such a center work in the next Red Flag exercise in October.

The same units here today will prob-

ably continue to train others in this facility. The 133rd Air Control Squadron, Iowa National Guard, and the 505th Operations Squadron, Hurlburt Field will most likely be the primary units using the facility.

Officials stress that JEFX '00 is only an experiment and a process. It isn't an exercise designed to train or be a smooth process. Some of the initiatives that take place in this JEFX may not be realized or used for years, if ever.

Agile (Continued from Page 3)

Translation: a lighter, leaner, more lethal deployment package.

One initiative the team will test during JEFX '00 is the quick reaction site survey. When no data exists for a potential beddown location, a small team of functional experts can deploy to the area and conduct the site survey to determine if a particular airfield can support robust operations. In the past, this data

has only been available after the survey team has returned from the site. The new initiative tests and evaluates an automated process for collecting, transmitting and uploading the information from the field using a new software system.

"During operations in Kosovo, we sent out 35 teams and it took approximately two weeks to get all of the information," McGill explained.

"The new system provides a standardized checklist in addition to the software program, and we should now be able to get the information in about six hours from the time the team arrives."

The initiative will be tested during the JEFX scenario when a 4-5 member site evaluation team "deploys" to a potential bare-base location. The team will gather, compile and report survey data on the

area, which simulates a deployed location, via the new survey system. Experiment evaluators will determine whether the initiative meets its objectives.

"If it works the way it's supposed to, we'll be able to provide much more proactive information rather than reactive information," McGill said. "This could truly be one of the golden nuggets to come out of this experiment."

An experiment in double imagery

Twins cause confusion at JEFX

By Tech. Sgt. Stefan Alford

JEFX Public Affairs

HURLBURT FIELD, Fla. — Imagery technology is one of the 45 initiatives being looked at during Joint Expeditionary Force eXperiment '00.

And while the mirror images of Staff Sgts. Lori Payton and Lynn Tigler are also being looked at, they are not part of some double vision scenario designed to test a new technology. What the twins are doing, however, is causing plenty of confusion for other JEFX '00 participants.

"A lot of people here are coming up to me and congratulating me on getting married because they see the different name (on the uniform)," said Lori. "One captain even yelled at me — 'How could you get married and not tell me!'"

Lori, who is on temporary duty here from Davis-Monthan Air Force Base, Ariz., said she sometimes plays along when people mistake her for her sister Lynn, who is permanently assigned at Hurlburt Field. The two are both information managers and work in the Joint Personnel Access Center.

That can really get mind-boggling when JEFX participants in-process through Lori at the front desk and then turn the corner to see Lynn at the copy machine. "Hey, wait a minute..." is usually a common response.

But that's not all the twins have in common. Born March 27, 1969, in Sayre, Pa., they joined the Air Force together Dec. 30, 1987, and were in the same basic training flight. Then, they were roommates in tech school. After that, they both received their first assignment to Davis-Monthan and were stationed together for their first seven years in the service.

"I don't know how we ended up together," said Payton. "We weren't coded for any buddy system and didn't request to be (assigned together)."

While at Davis-Monthan they both



Photo by Senior Airman Lee Rogers

From left, Staff Sgt. Lori Payton and Lynn Tigler.

got married to guys from Indiana — sheer coincidence, they say. Before they left the base, they were both divorced.

Those kinds of parallels just seem to come naturally.

"We can show up after not seeing each other for months and we'll be wearing the exact same dress and have the same hairstyle," said Lynn, who is technically seven minutes older than Lori. "Last year, we even sent our mom the same mother's day and birthday cards from two different states."

"Not only that," said Lori, "but we sent each other the exact same card for Valentine's Day this year."

Maybe that's not so unusual after all, considering the two used to sleepwalk together as children and are so identical in mannerisms and thought processes that even their parents couldn't always tell them apart.

"That's nothing," said Lori, "she (Lynn) will look at pictures of the two of us on vacation and she'll say something like, 'Boy, I was having a good hair day

there,' and I'll have to say, 'That's me.' So she can't even tell us apart looking at pictures."

If they have trouble keeping each other straight, what hope do the rest of the participants at JEFX '00 possibly have?

"Well, Lynn is the one with the stupid, fake giggle," said Lori helpfully.

"Hey, it's not fake," interjected Lynn.

Lori also admits to the self-proclaimed title of the 'evil twin' based on her tendency to play tricks on people.

"Yep, she's mean and I'm friendly," agrees Lynn. "She puts in appearances for me in Tucson at places. For example, she'll show up at a karaoke bar, use my name to sing and make my friends there think I'm back on vacation. I'm not too pleased about that."

For the present, both are here for the Air Force Chief of Staff-sponsored experiment, which may lead some to wonder whether or not there might be a need for a 46th initiative to develop an imagery technology device to tell them apart.